EXHIBIT 37

EXPERT REPORT OF MARK A. SCHUMACHER, M.D., Ph.D.

MARCH 25, 2019

I. INTRODUCTION

1. My name is Mark A. Schumacher, M.D., Ph.D. I have been retained by Plaintiffs Cuyahoga County and Summit County to offer my expert opinions on issues related to the medical use of opioids for the treatment of pain, the conduct of opioid manufacturers relating to the marketing and promotion of prescription opioids, and related topics.

2. My curriculum vitae, a copy of which is attached as **Appendix 1** to this report, describes my education, background, qualifications, and my publications. I have not testified in deposition or at trial in the last four years.

3. I am being compensated at a rate of $450 per hour for my services in this litigation. I am also being reimbursed for all reasonable expenses incurred for my work on this litigation. No part of my compensation is contingent upon the outcome of this litigation, and I have no interest in the litigation or with either party.

4. This report contains a true and accurate statement of my opinions in this matter. The matters cited in this expert report are based on my personal knowledge, education, and years of medical experience and, if called to testify, I will testify to the same effect. These opinions are based on my education, training and experience as well as the data, evidence, and literature cited herein and are offered to a reasonable degree of medical certainty. I reserve the right to supplement my analysis and opinions based on additional evidence or information that is made available to me after the date of this report, including additional expert disclosures made after March 25, 2019, as approved by the Court.

II. SUMMARY OF OPINIONS:

5. It is my opinion, based on my expertise in the field of pain management, that the increased prescribing of opioids in the United States has caused tremendous harm that would not have occurred if not for the actions of the companies that aggressively promoted the use of

OxyContin to the opioid most associated with cancer (morphine) or stating that OxyContin was a strong as morphine (when in fact the oxycodone is stronger).

49. In 1996, the American Academy of Pain Medicine and American Pain Society issued a joint consensus statement titled *The Use of Opioids for the Treatment of Chronic Pain*, describing potential benefits of using opioids for management of chronic pain (including non-cancer) (Haddox et al. 1997). This included statements that promoted the use of opioids for chronic non-cancer pain, that the risk of prescription opioids causing addiction was a myth, and chronic pain can be measured on a 0 to 10 scale as easily as acute pain (Campbell 1996). Moreover, it was argued by this group that studies indicate that the de novo development of addiction when opioids are used for the relief of pain is low and the risk of opioid-induced respiratory depression tends to be a short-lived phenomenon that generally occurs only in the opioid-naive patient, and is antagonized by pain (Haddox et al. 1997)—a dangerous position that was never grounded in rigorous science and has been proven wrong (Dowell, Haegerich, and Chou 2016).

50. There were also concerted efforts by pain specialists funded significantly by Purdue and the other opioid manufacturers to persuade state medical boards and state legislatures to remove legal impediments to opioid-based pain treatment (Hoffman 2016). This was accompanied by a campaign to call public and professional attention to the prevalence of pain and its seriousness as a public health problem. This concept was also supported by the American Academy of Pain Medicine and American Pain Society to advocate for the interests of pain patients suggesting that pain be considered a "5th vital sign," ostensibly in an effort to improve pain assessment and treatment. (Campbell 1996). Although increasing attention was drawn to the assessment and treatment of pain, there was little to no progress in the development of novel pain